Jacob Cole, Parker Cantu, Michael Pittard

**Team**: The Textbook Triad **Project**: Untextbook Finder

## Voertman's Scraper code

```
# Class to fill out textbook search form for Voertman's
# Use the following command to call this from PHP where VALUE is <option value="x">:
       scrapy crawl voertmans -a departmentChoice=VALUE -a courseChoice=VALUE -a
sectionChoice=VALUE
# For example, this is for UNT, FALL 2015, ACCT, 2010, ALL
       e.g. scrapy crawl voertmans -a departmentChoice=198 -a courseChoice=2010 -a
sectionChoice=41334
# Author: Jacob Cole
class VoertmansSpider(scrapy.Spider):
       name = "voertmans"
       allowed_domains = ["voertmans.textbooktech.com"]
       start_urls = (
              "http://voertmans.textbooktech.com/textbook",
       )
       def __init__(self, departmentChoice, courseChoice, sectionChoice):
              self.departmentChoice = departmentChoice
              self.courseChoice = courseChoice
              self.sectionChoice = sectionChoice
       def convertToScrapyObject(self, source):
              sou2 = source.encode('ascii','ignore')
              hxs = HtmlXPathSelector(text=sou2)
              return hxs
       def submitForm(self, response):
              driver = webdriver.Remote("http://localhost:4444/wd/hub",
webdriver.DesiredCapabilities.HTMLUNITWITHJS)
              driver.get(response.url)
              #select UNT from dropdown
              schoolOption =
driver.find element by xpath("//select[@id='school selection']/option[@value='6']")
              schoolOption.click()
              driver.implicitly_wait(5)#set to wait for 10 seconds for subsequent element's
options to appear
              #select term from dropdown
              termOption =
driver.find_element_by_xpath("//select[@id='term_selection']/option[@value='25']")
```

```
termOption.click()
              #select department from dropdown
              departmentOption = driver.find_element_by_xpath(
                      "//select[@id='department_selection']/option[@value="" +
self.departmentChoice + "']"
              departmentOption.click()
              #select course from dropdown
              courseOption = driver.find_element_by_xpath(
                      "//select[@id='course_selection']/option[@value='" + self.courseChoice +
""]"
              courseOption.click()
              #select section from dropdown
              sectionOption = driver.find_element_by_xpath(
                      "//select[@id='section_selection']/option[@value="" + self.sectionChoice +
""]"
              sectionOption.click()
              driver.find_element_by_id("search-button").click()
              time.sleep(5)
              selSource = driver.page source
              driver.quit()
              return self.convertToScrapyObject(selSource)
       def sendAsPost(self, bookName, bookChoice):
              name = bookName[0].rstrip('\r\n')
              new = bookChoice[0].rstrip('\r\n')
              rental = bookChoice[1].rstrip('\r\n')
              result = {'bookName': name, 'bookNew': new, 'bookRental': rental}
              jsonResult = json.dumps(result).rstrip('\r\n')
              print jsonResult
       def parse(self, response):
              selector = self.submitForm(response)
              bookName = selector.select('//div[@class="book-name"]/text()').extract()
```

Jacob Cole, Parker Cantu, Michael Pittard

**Team**: The Textbook Triad **Project**: Untextbook Finder

bookChoice = selector.select('//td[@class="input-box book-choices
a-right"]/select/option/text()').extract()

self.sendAsPost(bookName, bookChoice)

## Unt Scraper code (inserts data into DB)

```
# Author: Jacob Cole
# Class for scraping all books from the UNT bookstore
# This is only ran to obtain book prices to insert into our database. It will not be ran every time a
book is selected.
       # So debug statements are okay and helpful if the script fails.
class Book(Object):
       pass
class UntbookstoreSpider(scrapy.Spider):
       name = "untbookstore"
       allowed_domains = ["unt.bncollege.com"]
       start_urls = (
'http://unt.bncollege.com/webapp/wcs/stores/servlet/TBWizardView?catalogId=10001&langId=-1
&storeId=71237',
       )
       globel = 0
       globeJ = 0
       BookClass = {'department': ", 'course': ", 'section': "}
       def convertToScrapyObject(self, source):
              sou2 = source.encode('ascii','ignore')
              hxs = HtmlXPathSelector(text=sou2)
              return hxs
       def refillOutForm(self):
              self.termDropDown =
self.driver.find_element_by_xpath("//div[@class='bncbSelectBox termHeader']")
              self.termDropDown.click()
              self.termOption = self.driver.find_element_by_xpath('//li[@class="bncbOptionItem"
termOption" and text()="FALL 2015"]')
              self.termOption.click()
```

```
self.element_to_hover_over =
self.driver.find element by xpath("//ul[@class='columnLabelLayout']/li[2]/input")
              self.hoverDept =
ActionChains(self.driver).move_to_element(self.element_to_hover_over)
              self.hoverDept.perform()
              self.element to hover over.click()
              wait = WebDriverWait(self.driver, 10)
              self.deptToClick =
wait.until(EC.presence_of_element_located((By.XPATH,"//ul[@class='columnLabelLayout']/li[2]/
ul/li["+str(UntbookstoreSpider.globel+1)+"]")))
               self.deptToClick.click()
              time.sleep(2)
              self.element to hover over2 =
self.driver.find_element_by_xpath("//ul[@class='columnLabelLayout']/li[3]/input")
              self.hoverCourse =
ActionChains(self.driver).move_to_element(self.element_to_hover_over2)
              self.hoverCourse.perform()
              self.element_to_hover_over2.click()
              wait = WebDriverWait(self.driver, 10)
              self.courseToClick =
wait.until(EC.visibility_of_element_located((By.XPATH,"//ul[@class='columnLabelLayout']/li[3]/ul
/li["+str(UntbookstoreSpider.globeJ+1)+"]")))
              self.courseToClick.click()
              time.sleep(2)
       def insertIntoParse(self):
               selector = self.convertToScrapyObject(self.driver.page_source)
              bookRequired = selector.select('//div[@class="book-list"]')
              try:
                      isbn = bookRequired.select('.//ul/li[3]/text()').extract()
```

# for some reason the indexes vary with having the isbn or not. possibly

due to white space

try:

except ValueError:

isbnB = isbn[1].strip()

```
isbnB = isbn[0].strip()
```

```
name =
bookRequired.select('.//h1[@id="skipNavigationToThisElement"]/a/text()').extract()
                     nameB = name[0].lstrip()
                     nameB2 = nameB.rstrip()
                     priceNew = bookRequired.select('.//li[@class="selectableBook" and
contains(text(), "BUY NEW")]/span/text()').extract()
                     priceNewB = priceNew[0].lstrip()
                     priceNewB2 = priceNewB.strip()
                     priceNewB3 = re.sub('[$]', ", priceNewB2)
                     try:
                            existingBook =
Book.Query.get(department=UntbookstoreSpider.BookClass['department'],
course=UntbookstoreSpider.BookClass['course'],
                                   section=UntbookstoreSpider.BookClass['section'])
                     except QueryResourceDoesNotExist:
                            book = Book(isbn=int(isbnB), name=nameB2,
priceNew=float(priceNewB3), department=UntbookstoreSpider.BookClass['department'],
                                   course=UntbookstoreSpider.BookClass['course'],
section=UntbookstoreSpider.BookClass['section'])
                            book.save()
              except IndexError:
                     print "Materials pending."
       def parse(self, response):
              self.driver = webdriver.Firefox()
              self.driver.get(response.url)
              self.termDropDown =
self.driver.find_element_by_xpath("//div[@class='bncbSelectBox termHeader']")
              self.termDropDown.click()
              self.termOption = self.driver.find_element_by_xpath('//li[@class="bncbOptionItem
termOption" and text()="FALL 2015"]')
              self.termOption.click()
              time.sleep(1)
              hxs = self.convertToScrapyObject(self.driver.page_source)
```

```
Project. Ontextbook Find
```

```
departments =
hxs.select('//ul[@class="columnLabelLayout"]/li[2]/ul/li//text()').extract()
              #fill out form with all combinations of choices
              i = 1
              UntbookstoreSpider.globel = i
              while (i < len(departments)):
                      depName = departments[i]
                      UntbookstoreSpider.BookClass['department'] = depName
                      if(i!=0):
self.driver.find_element_by_xpath("//ul[@class='columnLabelLayout']/li[2]/input").clear()
                      #hover and click input element
                      self.element_to_hover_over =
self.driver.find_element_by_xpath("//ul[@class='columnLabelLayout']/li[2]/input")
                      self.hoverDept =
ActionChains(self.driver).move_to_element(self.element_to_hover_over)
                      self.hoverDept.perform()
                      self.element_to_hover_over.click()
                      #click department
                      wait = WebDriverWait(self.driver, 10)
                      self.deptToClick =
wait.until(EC.presence_of_element_located((By.XPATH,"//ul[@class='columnLabelLayout']/li[2]/
ul/li["+str(i+1)+"]")))
                      self.deptToClick.click()
                      time.sleep(2)
                      #obtain course list
                      selector = self.convertToScrapyObject(self.driver.page_source)
                      courses =
selector.select('//ul[@class="columnLabelLayout"]/li[3]/ul/li//text()').extract()
                      i = 0
                      UntbookstoreSpider.globeJ = j
                      while (j < len(courses)):
                             courseName = courses[i]
                             UntbookstoreSpider.BookClass['course'] = courseName
                             if(i != 0):
self.driver.find_element_by_xpath("//ul[@class='columnLabelLayout']/li[3]/input").clear()
                             self.element_to_hover_over2 =
self.driver.find_element_by_xpath("//ul[@class='columnLabelLayout']/li[3]/input")
```

Team: The Textbook Triad

```
Project: Untextbook Finder
```

```
self.hoverCourse =
ActionChains(self.driver).move_to_element(self.element_to_hover_over2)
                             self.hoverCourse.perform()
                             self.element_to_hover_over2.click()
                             wait = WebDriverWait(self.driver, 10)
                             self.courseToClick =
wait.until(EC.visibility_of_element_located((By.XPATH,"//ul[@class='columnLabelLayout']/li[3]/ul
/li["+str(j+1)+"]")))
                             self.courseToClick.click()
                             time.sleep(2)
                             selector = self.convertToScrapyObject(self.driver.page_source)
                             sections =
selector.select('//ul[@class="columnLabelLayout"]/li[4]/ul/li//text()').extract()
                             k = 0
                             while (k < len(sections)):
                                     sectionName = sections[k]
                                     UntbookstoreSpider.BookClass['section'] = sectionName
                                     if(k != 0):
self.driver.find_element_by_xpath("//ul[@class='columnLabelLayout']/li[4]/input[2]").clear()
                                     self.element to hover over3 =
self.driver.find_element_by_xpath("//ul[@class='columnLabelLayout']/li[4]/input[2]")
                                     self.hoverSection =
ActionChains(self.driver).move_to_element(self.element_to_hover_over3)
                                     self.hoverSection.perform()
                                     self.element_to_hover_over3.click()
                                     wait = WebDriverWait(self.driver, 10)
                                     sectionToClick =
wait.until(EC.presence_of_element_located((By.XPATH,"//ul[@class='columnLabelLayout']/li[4]/
ul/li["+str(k+1)+"]")))
                                     sectionToClick.click()
                                     time.sleep(2)
                                     try:
                                            submitClick =
self.driver.find_element_by_class_name("largeActiveBtn")
                                            submitClick.click()
```

Jacob Cole, Parker Cantu, Michael Pittard **Team**: The Textbook Triad

Project: Untextbook Finder

```
time.sleep(3) \\ self.insertIntoParse() \\ self.driver.back() \\ time.sleep(5) \\ self.refillOutForm() \\ except NoSuchElementException: \\ print "No book for this course available." \\ k = k + 1 \\ j = j + 1 \\ UntbookstoreSpider.globeJ = j \\ i = i + 1 \\ UntbookstoreSpider.globeI = i \\ self.driver.quit()
```

## Form Process code

```
<?php
* This needs to be in the python directory to execute the scrapy command.*/
  session_start();
    //command to get voertmans book info
    echo "deptNumber = " . $deptNumber . "courseNumber = " . $courseNumber;
    $command = "/Library/Frameworks/Python.framework/Versions/2.7/bin/scrapy crawl
voertmans -a departmentChoice=" .
       $_SESSION["deptNumber"] . " -a courseChoice=" . $_SESSION["courseNumber"] . " -a
sectionChoice=41334";
    exec($command, $result);
    if(isset($result[0])){
       $resultData = json_decode($result[0], true);
       $_SESSION["bookNewVoert"] = $resultData["bookNew"];
       $_SESSION["bookRentalVoert"] = $resultData["bookRental"];
    }
?>
```

```
Project. Offication of the
```

```
<!DOCTYPE html>
<head>
      k rel="stylesheet" type="text/css" href="css\stylesheet.css" />
      <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>
      <script src="dropdownlist.js" type="text/javascript" ></script>
      <!-- links to the js file where the drop down list controls are kept -->
</head>
<body>
      <div id = "banner"> <!--this is the title on the page-->
             <div id = "bannertext"><h1>UNTextbookFinder</h1></div>
      </div>
      <div id = "left">
                          <!--actually the banner for the website-->
             <a href="aboutus/aboutus.html">About Us</a>
      </div>
      <div id = "right">
             <form id="bookform" name="bookform"</pre>
action="python/untextbookfinder/processForm.php" method="post">
                    <div id = "select">
                          <select name="department" class = "selectmenus"</pre>
                                        form="bookform" onchange="javascript:
                                 dropdownlist(this.options[this.selectedIndex].value);">
<!--options of departments list start here. indentation removed to shorten the text document>
<option value="" disabled="disabled" selected="selected">Select Category</option>
<option value="198|ACCT">ACCT - ACCOUNTING</option>
<option value="259|ADES">ADES - ART DESIGN</option>
<option value="250|AEAH">AEAH - ART EDUCATION ART HISTORY</option>
<option value="377|AECO">AECO - APPLIED ECONOMICS</option>
<option value="189|AGER">AGER - APPLIED GERANTOLOGY
<option value="242|ANTH">ANTH - ANTHROPOLOGY</option>
<option value="309|ARBC">ARBC - ARABIC</option>
<option value="185|ARCH">ARCH - ARCHAELOGY</option>
<option value="236|ART">ART - ART
<option value="275|ASTU">ASTU - ART STUDIO</option>
<option value="220|ATTD">ATTD - APPLIED TECHNOLOGY, TRAINING AND
DEVELOPMENT</option>
<option value="184|BCIS">BCIS - BUSINESS COMPUTER INFORMATION
SYSTEMS</option>
<option value="199|BEHV">BEHV - BEHAVIOR ANALYSIS
<option value="234|BIOC">BIOC - BIOCHEMISTRY</option>
<option value="228|BIOL">BIOL - BIOLOGY</option>
<option value="249|BLAW">BLAW - BUSINESS LAW</option>
```

**Team**: The Textbook Triad

```
Project: Untextbook Finder
```

```
<option value="390|BMEN">BMEN - BIOMEDICAL ENGINEERING</option>
<option value="192|BUSI">BUSI - BUSINESS</option>
<option value="246|CBCM">CBCM - COMMERCIAL PHOTOGRAPHY</option>
<option value="221|CECS">CECS - COMPUTER EDUCATION AND COGNATIVE
SYSTEMS</option>
<option value="240|CHEM">CHEM - CHEMISTRY</option>
<option value="316|CHIN">CHIN - CHINESE</option>
<option value="183|CJUS">CJUS - CRIMINAL JUSTICE
<option value="213|CMHT">CMHT - MERCHANDISING, HOSPITALITY, & amp;
TOURISM</option>
<option value="237|CNET">CNET - CONSTRUCTION ENGINEERING
TECHNOLOGY</option>
<option value="258|COMM">COMM - COMMUNICATION STUDIES</option>
<option value="238|COUN">COUN - COUNSELING</option>
<option value="194|CSCE">CSCE - COMPUTER SCIENCE/COMPUTER
ENGINEERING</option>
<option value="200|DANC">DANC - DANCE</option>
<option value="271|DFST">DFST - DEVELOPMENT AND FAMILY STUDIES</option>
<option value="214|DRTL">DRTL - DIGITAL READING
<option value="181|DSCI">DSCI - DECISION SCIENCES</option>
<option value="281|EADP">EADP - EMERGENCY ADMINISTRATION AND
PLANNING</option>
<option value="267|ECON">ECON - ECONOMICS</option>
<option value="226|EDAD">EDAD - EDUCATIONAL ADMINISTRATION AND
SUPERVISION</option>
<option value="225|EDBE">EDBE - BILINGUAL AND ESL EDUCATION</option>
<option value="229|EDCI">EDCI - EDUCATION CURRICULUM AND INSTRUCTION
<option value="230|EDEC">EDEC - EDUCATION CURRICULUM AND
INSTRUCTION</option>
<option value="231|EDEE">EDEE - ELEMENTARY EDUCATION</option>
<option value="256|EDHE">EDHE - HIGHER EDUCATION</option>
<option value="269|EDLL">EDLL - LANGUAGE & amp; LITERACY STUDIES
<option value="262|EDME">EDME - MIDDLE SCHOOL EDUCATION
<option value="223|EDRE">EDRE - READING</option>
<option value="224|EDSE">EDSE - SECONDARY EDUCATION
<option value="270|EDSP">EDSP - SPECIAL EDUCATION</option>
<option value="376|EDUC">EDUC - EDUCATIONAL FOUNDATIONS
<option value="182|EENG">EENG - ELECTRICAL ENGINEERING</option>
<option value="245|ELET">ELET - ELECTRONICS ENGINEERING TECHNOLOGY
<option value="218|ENGL">ENGL - ENGLISH</option>
<option value="239|ENGR">ENGR - ENGINEERING TECHNOLOGY</option>
<option value="233|EPSY">EPSY - EDUCATIONAL PSYCHOLOGY</option>
```

<option value="251|FINA">FINA - FINANCE</option>

```
<option value="279|FREN">FREN - FRENCH</option>
<option value="178|GEOG">GEOG - GEOGRAPHY</option>
<option value="179|GEOL">GEOL - GEOLOGY</option>
<option value="277|GERM">GERM - GERMAN</option>
<option value="215|HFMD">HFMD - HOME FURNISHING</option>
<option value="193|HIST">HIST - HISTORY</option>
<option value="241|HLTH">HLTH - HEALTH PROMOTION</option>
<option value="208|HMGT">HMGT - HOSPITALITY MANAGEMENT/option>
<option value="263|HNRS">HNRS - HONORS</option>
<option value="384|INFO">INFO - INFORMATION SCIENCES</option>
<option value="261|INST">INST - INTERNATIONAL STUDIES
<option value="266|ITAL">ITAL - ITALIAN
<option value="273|JAPN">JAPN - JAPANESE</option>
<option value="191|JOUR">JOUR - JOURNALISM
<option value="211|KINE">KINE - KINESOLOGY
<option value="175|LGAV">LGAV - AVIATION
<option value="272|LING">LING - LINGUISTICS</option>
<option value="176|LSCM">LSCM - LOGISTICS AND SUPPLY CHAIN
MANAGEMENT</option>
<option value="222|LTEC">LTEC - LEARNING TECHNOLOGY</option>
<option value="195|MATH">MATH - MATHEMATICS</option>
<option value="204|MDSE">MDSE - MERCHANDISING</option>
<option value="212|MEEN">MEEN - MECHANICAL AND ENERGY ENGINEERING
<option value="248|MEET">MEET - MECHANICAL ENGINEERING TECHNOLOGY
<option value="243|MFET">MFET - MANUFACTURING ENGINEERING
TECHNOLOGY</option>
<option value="180|MGMT">MGMT - MANAGEMENT
<option value="177|MKTG">MKTG - MARKETING</option>
<option value="190|MSCI">MSCI - MANAGEMENT SCIENCE</option>
<option value="391|MSET">MSET - MASTER'S ENGINEERING TECH</option>
<option value="232|MTSE">MTSE - MATERIALS SCIENCE AND EENGINEERING
<option value="392|MUAC">MUAC - APPLIED PRIVATE MUSIC LESSONS</option>
<option value="186|MUAG">MUAG - APPLIED MUSIC-PEDAGOGY,DICTION AND
LITERATURE</option>
<option value="385|MUAM">MUAM - APPLIED PRIVATE MUSIC
<option value="196|MUAS">MUAS - APPLIED PRIVATE MUSIC</option>
<option value="203|MUCP">MUCP - MUSIC COMPOSITION
<option value="264|MUED">MUED - MUSIC/EDUCATION
<option value="219|MUET">MUET - MUSIC/ENTHNOMUSICOLOGY</option>
<option value="378|MUGC">MUGC - MUSIC/GENERAL</option>
<option value="257|MUJS">MUJS - MUSIC,JAZZ STUDIES
<option value="202|MUMH">MUMH - MUSICOLOGY</option>
```

<option value="205|MUTH">MUTH - MUSIC THEORY</option>

**Team**: The Textbook Triad

**Project**: Untextbook Finder

```
<option value="387|NCTM">NCTM - MATHEMATICS</option>
<option value="274|PACS">PACS - PUB AFFAIRS COMM SERV</option>
<option value="280|PADM">PADM - PUBLIC ADMINISTRATION</option>
<option value="252|PHED">PHED - PHYSICAL EDUCATION
<option value="247|PHIL">PHIL - PHILOSOPHY</option>
<option value="227|PHYS">PHYS - PHYSICS</option>
<option value="254|PSCI">PSCI - POLITICAL SCIENCE</option>
<option value="210|PSYC">PSYC - PSYCHOLOGY</option>
<option value="282|REAL">REAL - REAL ESTATE</option>
<option value="209|RECR">RECR - RECREATION AND LEISURE STUDIES/option>
<option value="235|RHAB">RHAB - REHABILITATION STUDIES
<option value="255|RMIN">RMIN - RISK MANAGEMENT AND INSURANCE</option>
<option value="216|RTVF">RTVF - RADIO, TELEVISION AND FILM
<option value="265|RUSS">RUSS - RUSSIAN</option>
<option value="207|SLIS">SLIS - LIBRARY AND INFORMATION SCIENCES</option>
<option value="187|SOCI">SOCI - SOCIOLOGY</option>
<option value="278|SOWK">SOWK - SOCIAL WORK</option>
<option value="276|SPAN">SPAN - SPANISH</option>
<option value="217|SPHS">SPHS - SPEECH AND HEARING SCIENCES</option>
<option value="260|TECM">TECM - TECHNICAL COMMUNICATION/option>
<option value="201|THEA">THEA - THEATRE</option>
<option value="188|UCRS">UCRS - UNIVERSITY COURSES</option>
<option value="253|WMST">WMST - WOMEN'S STUDIES
<!--options of departments list stops here.>
                         </select>
                         <script type="text/javascript" language="JavaScript">
                        document.write('<select name="subcategory"><option
                                                  value="">Select
                                           Sub-Category</option></select>')
                         </script>
                         <noscript>
                         <select name="subcategory" class="selectmenus"</pre>
                                                        id="subcategory">
                         <option value="">Select Sub-Category</option>
                         </select>
                         </noscript>
                         <select class = "selectmenus" name = "section" form="bookform">
                               <option value="" disabled="disabled"</pre>
                                                  selected="selected">Select</option>
```

```
Project: Untextbook Finde
```

```
<option value="ALL">ALL</option>
                            </select>
                     <input id="button" type = "submit">
              </div>
              </form>
       </div>
       <div id = "footer">
       </div>
</body>
                                       Result page
<?php
       session_start();
       include '../php/getUntData.php';
?>
<html>
<head>
       k rel="stylesheet" type="text/css" href="../css/stylesheet.css" />
       <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>
</head>
<body>
       <div id = "banner">
              <div id = "bannertext"><h1>UNTextbookFinder</h1></div>
       </div>
       <div id = "left">
              <a href="../index.html">Home</a>
              <a href="../aboutus/aboutus.html">About Us</a>
       </div>
       <div id = "right">
              <div id="bookinfo">
                     <div id="generalinfo" class="bookstore">
                            <h1>Info</h1>
                            >
                                   <?php
                                   //check only book name. book name should always be
present if a book is available.
                                   $deptArray = explode("|", $_POST["department"]);
                                   $deptNumber = $deptArray[0];
                                   $deptName = $deptArray[1];
                                   $_SESSION["deptNumber"] = $deptNumber;
                                   $_SESSION["courseNumber"] = $_POST["course"];
                                   queryDataUnt($deptName, $_POST["course"]);
```

Jacob Cole, Parker Cantu, Michael Pittard **Team**: The Textbook Triad **Project**: Untextbook Finder

```
if(isset($GLOBALS["name"])){
                                         if(isset($GLOBALS["name"]))
                                                echo "Name: " . $GLOBALS["name"];
                                                echo "<br/>";
                                         if(isset($GLOBALS["isbn"]))
                                                 echo "ISBN: " . $GLOBALS["isbn"];
                                                echo "<br/>";
                                  } else {
                                         echo "Book not available.";
                                  }
                                  ?>
                           </div>
                    <div id="infodivide"></div>
                    <div id="voertmans" class="bookstore">
                           <h1>Voertman's</h1>
                            <span id="loading" hidden>Scraping data...</span>
                           >
                            </div>
                    <div id="unt" class="bookstore">
                           <h1>UNT Bookstore</h1>
                            >
                                   <?php if(isset($GLOBALS["priceNewUnt"])) : ?>
                                         New Price - $<?=$GLOBALS["priceNewUnt"];?>
                                   <?php endif;?>
                            </div>
                     <div id="chegg" class="bookstore">
                            <h1>Chegg</h1>
                    </div>
                     <div id="amazon" class="bookstore">
                            <h1>Amazon</h1>
                    </div>
              </div>
       </div>
       <div id = "footer">
       </div>
</body>
</html>
<script type="text/javascript">
      $("#loading").show();
  $.ajax({
```

```
type: "POST",
              url: "../python/untextbookfinder/processForm.php",
              success: function() {
                     alert("Finished obtaining Voertman's data.");
                     var bookNew = <?php echo
ison encode($ SESSION["bookNewVoert"]);?> + "<br/>";
                     var bookRental = <?php echo
json_encode($_SESSION["bookRentalVoert"]);?>;
                     $("#loading").hide();
                     $("#voertmans p").after(bookNew.trim(), bookRental.trim());
              }
  });
</script>
                                UNT Query Database script
<?php
# queries our database from Parse.com
require '../parseConnect.php';
use Parse\ParseObject;
use Parse\ParseQuery;
use Parse\ParseException;
function gueryDataUnt($department, $course, $section = "001") {
  $query = new ParseQuery("Book");
  $query->startsWith("department", $department);
  $query->equalTo("course", $course);
  $query->startsWith("section", $section);
  $query->limit(1);
  try {
     $result = $query->find();
     if(isset($result[0])) {
     $object = $result[0];
       $GLOBALS['isbn'] = $object->get("isbn");
       $GLOBALS['name'] = $object->get("name");
       $GLOBALS['priceNewUnt'] = $object->get("priceNew");
  } catch (ParseException $ex) {
     echo "Book not found in database.";
  }
}
```